Credit and Punishment:

The Career Incentives of Wall-Street Bankers

Janet Gao, Kristoph Kleiner, and Joseph Pacelli

Kelley School of Business, Indiana University

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Three Key Findings from a Public Survey (Sapienza and Zingales, 2013)

1. **The economy would be better off without the financial sector**
   - 48% of Americans believe that finance hurts the US economy, only 34% say that finance benefits the economy
2. **Bankers are more harmful than the banks**
   - Based on a scale of 1-5, banks are more trustworthy than bankers (2.95 vs. 2.60)
3. **We need greater regulation/governance of bankers**
   - The major causes of the financial crisis were poor corporate governance (50.5%) and lack of regulation (31.6%)

Research Questions

- **Question I:** Do Wall Street bankers have incentives to minimize losses?
- **Question II:** Do these incentives minimize bank risk exposure?

Hypothesis

Do these bankers have incentives to minimize credit losses?

1. **On the one hand ...**
   - Credit losses are costly to shareholders [Demirguc-Kunt et al, 2013; Gopalan et al 2013]
   - Banks respond to credit losses by cutting credit supply [Chava and Purnanandam 2011] and increasing risk management [Murfin 2012]
2. **On the other hand...**
   - The public has little trust in the incentive structure of Wall Street bankers [Sapienza and Zingales, 2013]
   - Limited academic evidence that Wall Street bankers face career consequences following credit losses [Griffin et al 2016]
   - Bank incentives promote short-term gains at the cost of high-risk exposure [Berger, Imbierowicz, and Rauch, 2017]

Features of the Study

- We construct a novel database matching the employment history of bankers to the performance of the syndicated loans (approximately $100 million loans) they originate
  - Identities collected from electronic signatures attached to over 2,500 credit agreements appended to SEC filings
  - Employment histories obtained from *LinkedIn* profiles
- The combined dataset contains 1,436 bankers employed by over 100 major corporate banking departments from the period of 1994–2014
- We observe 649 instances of banker departures
- In a given year, 10% of bankers will experience a credit event (downgrades, defaults, borrower bankruptcies) in their loan portfolio
- Data helps us identify banker turnover following a negative credit event in the loan portfolio

Preview of the Results

Result I: Lower-level bankers originate large-scale syndicated loans

- Bankers anchor credit spreads based on past loan terms
- Banker FE explain 36-39% of the variation in loan outcomes (compared to 4-5% with Bank FE)

Result II: Banks discipline bankers following credit events (loan downgrade/default, borrower bankruptcy)

- The relative likelihood of turnover increases by 50% following a credit event
- The likelihood of turnover is greater for (i) defaults/bankruptcies and (ii) lead arrangers
- Face demotion at the new bank following negative credit events

Result III: Banker incentives lead to increased risk management tools (covenants and covenant strictness)

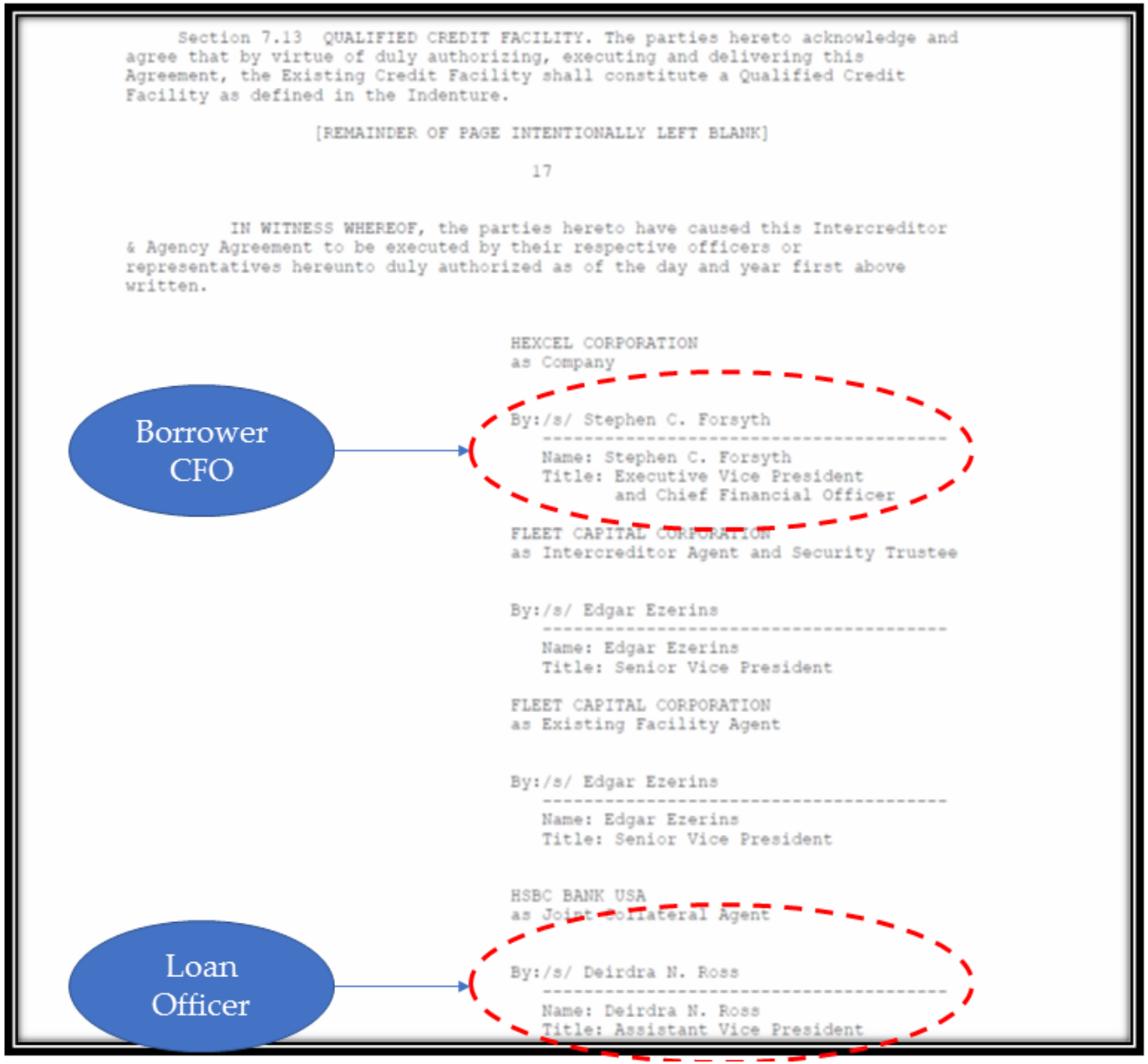
- Credit events are uncorrelated with banker turnover when the underlying loan has a high (risk-adjusted) number of covenants/strictness
- Bankers tighten loan terms during periods of increased turnover risk

Data Sources

We construct our sample using data from various sources

- LPC Dealscan: Loan contract terms for loans originated during the period 1994–2012
- SEC filings: Exhibits to firms' 8-K's, 10-Q's and 10-K's, matched to 22,876 loans
  - Extract signature of bankers underwriting those loans
- *LinkedIn*: Employment history of bankers
- Firm financial conditions
  - Compustat: Firm fundamentals
  - S&P: Bond ratings, including default ratings ("D" or "SD")
  - UCLA LoPucki Database: Bankruptcy filings
- We construct a banker-bank-year sample consisting of 7,585 observations

Data Sources



Section 7.13 QUALIFIED CREDIT FACILITY. The parties hereto acknowledge and agree that by virtue of duly authorizing, executing and delivering this Agreement, the Existing Credit Facility shall constitute a Qualified Credit Facility as defined in the Indenture.

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IN WITNESS WHEREOF, the parties hereto have caused this Intercreditor & Agency Agreement to be executed by their respective officers or representatives hereunto duly authorized as of the day and year first above written.

HEXCEL CORPORATION
as Company

By:/s/ Stephen C. Forsyth

Name: Stephen C. Forsyth
Title: Executive Vice President
and Chief Financial Officer

FLEET CAPITAL CORPORATION
as Intercreditor Agent and Security Trustee

By:/s/ Edgar Ezerins

Name: Edgar Ezerins
Title: Senior Vice President

FLEET CAPITAL CORPORATION
as Existing Facility Agent

By:/s/ Edgar Ezerins

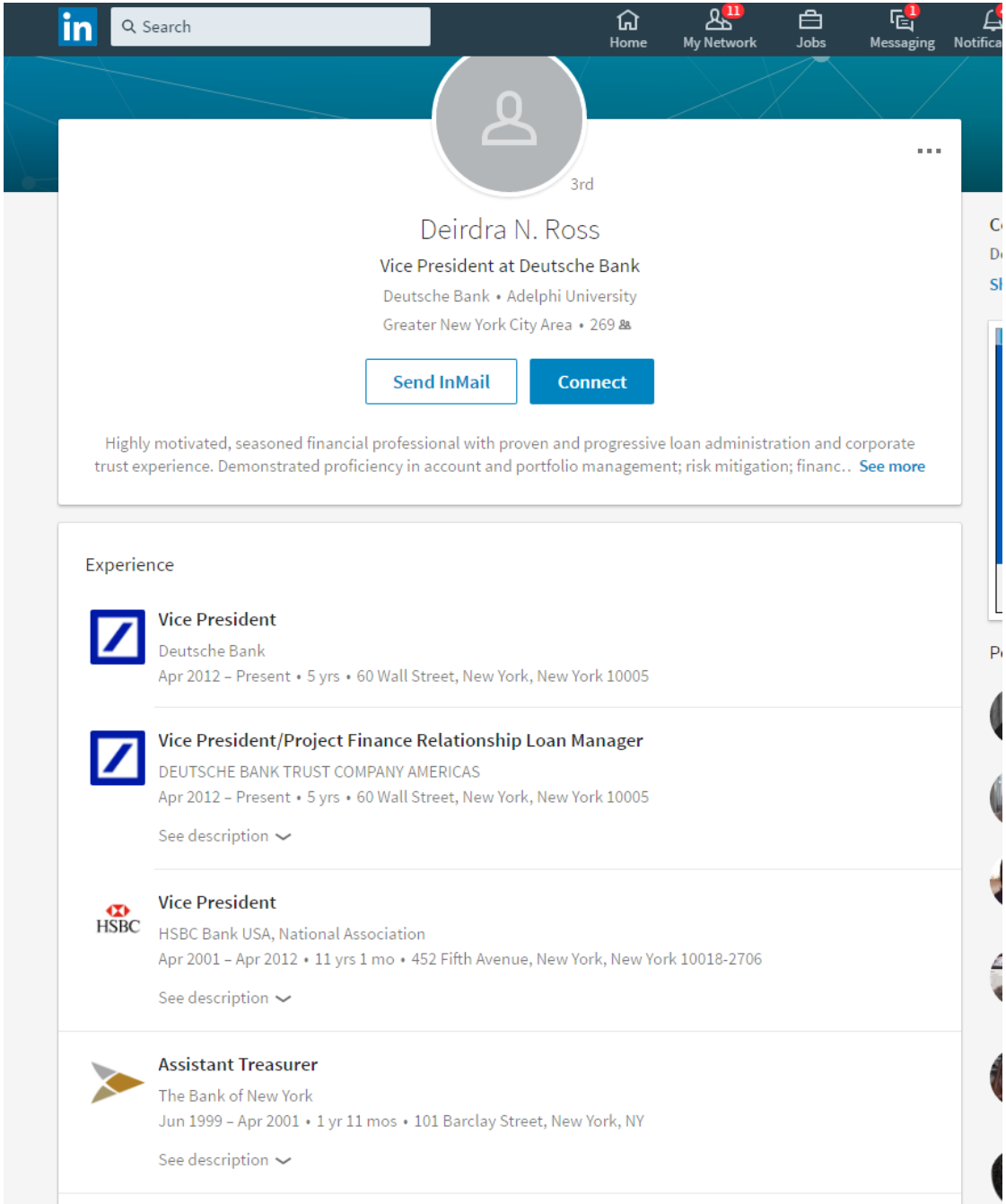
Name: Edgar Ezerins
Title: Senior Vice President

HSBC BANK USA
as Joint Collateral Agent

By:/s/ Deirdra N. Ross

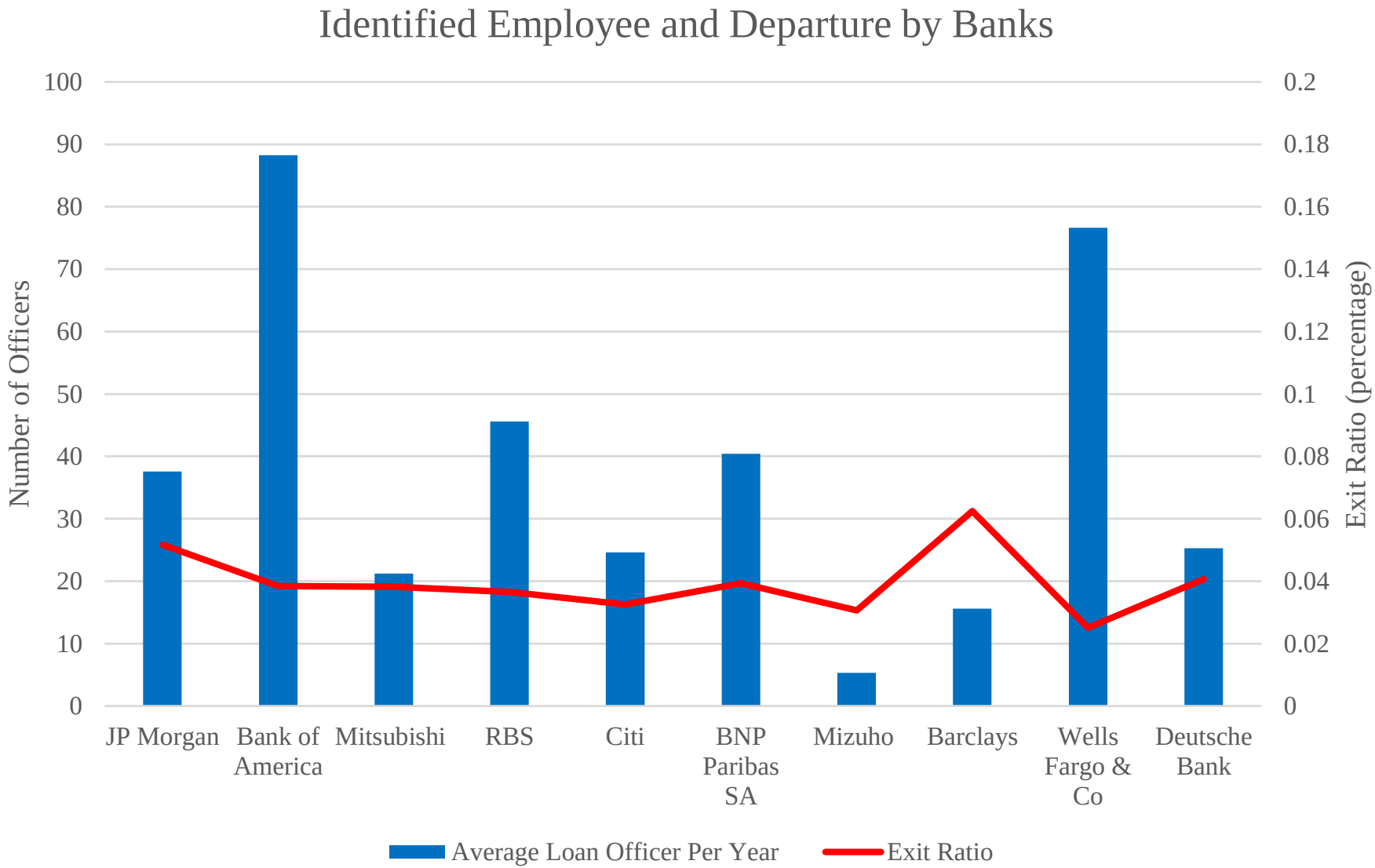
Name: Deirdra N. Ross
Title: Assistant Vice President

Data Sources



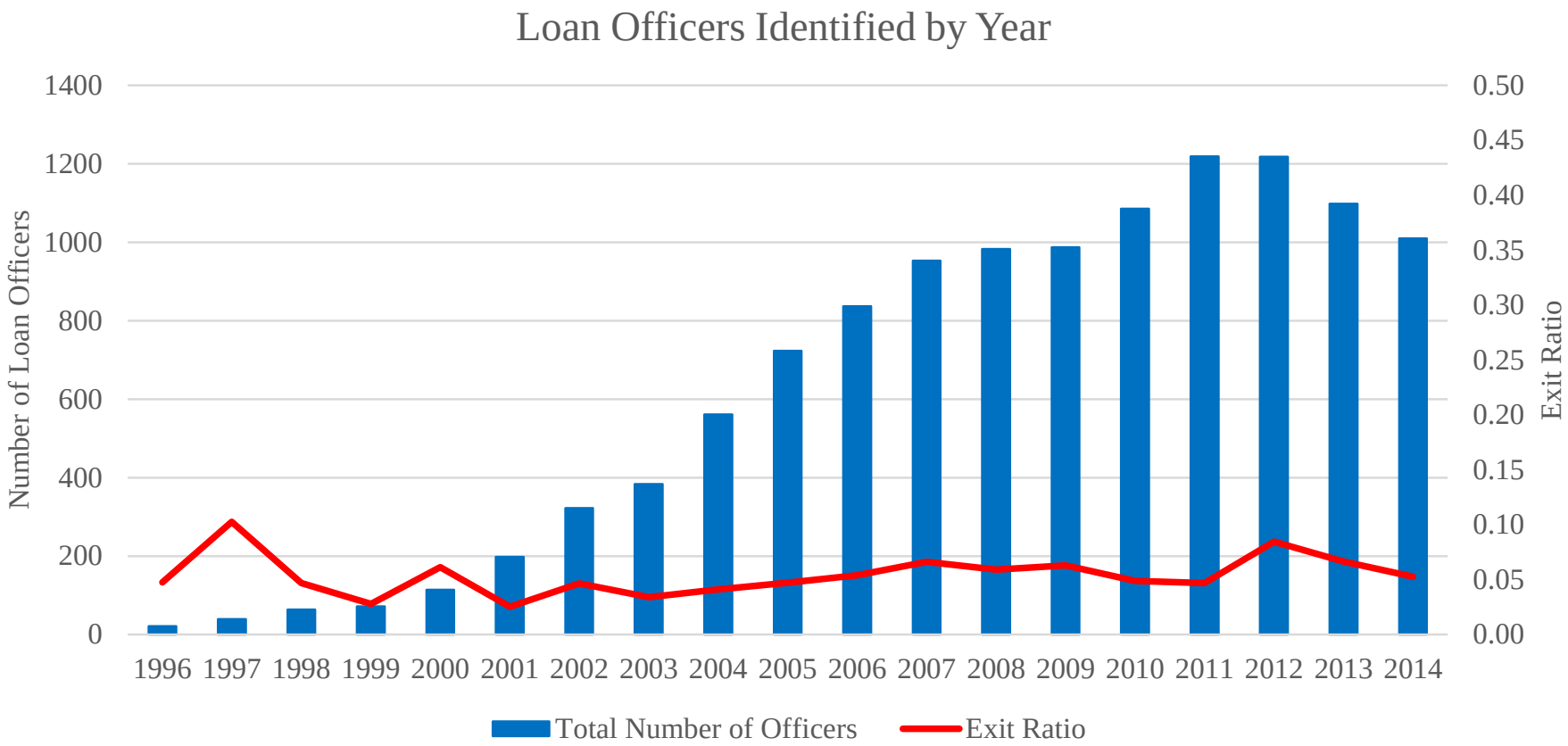
Univariate Analyses

- Similar turnover rates across banks



Univariate Analyses

- Stable turnover rates over time



Research Question I

Are bankers held accountable for large-scale credit losses?

Turnover Results I

$$Exit_{i,b,t} = \beta CreditEvent_{i,b,t} + \Xi_b + \Lambda_i + \Delta_t + Controls_{i,t} + \epsilon_{i,b,t}$$

where i indicates an officer, b a bank, t a year.

- *Exit*: an indicator for the last year that an officer works at a given bank
- *CreditEvent*: an indicator for any of the following negative credit events
- Ξ_b: bank-fixed effects; Λ_i: officer-fixed effects; Δ_t: year-fixed effects
- Controls Include Banker Controls (i.e. Tenure), Industry Controls (i.e. Returns), and Loan Controls (i.e. Spread)
- We expect $\beta > 0$, i.e., negative credit events should be associated with banker turnover

Turnover Results II

- Bankers are significantly more likely to depart their current bank following a credit event

Dep. Var.: *Exit*	(1)	(2)	(3)	(4)
Credit Event	0.0280***	0.0234***	0.0231**	0.0236**
	(3.21)	(2.65)	(2.43)	(2.50)
Year FE	No	Yes	Yes	Yes
Bank FE	No	Yes	Yes	Yes
Banker FE	No	No	Yes	Yes
Industry FE	No	No	Yes	Yes
Controls	No	No	No	Yes
Observations	7,585	7,585	7,585	7,585
Adjusted R^2	0.0014	0.0277	0.3625	0.3797

*** p-value$<$0.01, ** p-value$<$0.05, * p-value$<$0.10

Turnover Results III

- Bankers' turnover-performance sensitivity strengthens with the severity of the credit event and the banker's role in the loan contract

Dep. Var.: *Exit*	(1)	(2)	(3)	(4)
Credit Event defined by:	*Default*	*Downgrade*	*Lead*	*Participant*
Credit Event	0.0635***	0.0209**	0.0338**	0.0183
	(2.90)	(2.17)	(2.04)	(1.60)
Year FE	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes
Banker FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	7,585	7,585	7,585	7,585
R-squared	0.3800	0.3796	0.3795	0.3794

Turnover Results IV

- When exiting after a credit event, bankers face worse job outcomes

Dep. Var.:	*Promotion*		*Demotion*	
	(1)	(2)	(3)	(4)
*Credit Event*Exit*	-0.0864***	-0.0612**	0.0846***	0.0558***
	(-3.80)	(-2.34)	(4.89)	(2.92)
Credit Event	0.0007	-0.0028	0.0000	- 0.0025
	(0.12)	(-0.40)	(0.00)	(0.49)
Exit	0.5223***	0.5066***	0.3976***	0.4196***
	(60.71)	(49.20)	(60.77)	(55.81)
Fixed Effects	No	Yes	No	Yes
Controls	No	Yes	No	Yes
Observations	6,963	6,865	6,963	6,865
Adjusted R^2	0.3716	0.5353	0.3985	0.5989

Research Question II

Do banker incentives lead to greater risk management?

Contracting Results I

- Credit events are uncorrelated with turnover when the underlying loan has stricter (risk-adjusted) loan terms

Sample Partitioned By	*#Covenants*		*Strictness*	
	Low	High	Low	High
Dep. Var.: Exit	(1)	(2)	(3)	(4)
Credit Event	0.0375***	0.0008	0.0327**	0.0002
	(2.73)	(0.06)	(2.26)	(0.01)
Year FE	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes
Banker FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes
Observations	4,077	3,508	3,888	2,977
Adjusted R^2	0.4265	0.4585	0.4295	0.4699

Contracting Results II

- We examine whether contracting terms change during periods of heightened turnover risk
- Specifically, we evaluate the effect of a credit event on the number of covenants and covenant strictness:

$$LendingStandard_k = \gamma_0 + \gamma_1 CreditEvent_{i,b,t} + \gamma_2 FirmChar_{j,t} + \gamma_3 LoanChar_k + \Xi_b + \Gamma_{j,t} + \epsilon_k,$$

  where k indicates a loan contract extended by officer i in bank b. $\Gamma_{j,t}$ is industry-year FE
- If $\gamma_1 > 0$ for an officer's credit event, then the increased turnover risk is an effective incentive mechanism

Contracting Results III

- A banker's own credit event is associated with 0.13 more covenants (mean of 2) and a 0.02 increase in strictness (mean of 0.45)

Dep. Var.:	*Covenants*			*Strictness*		
	(1)	(2)	(3)	(4)	(5)	(6)
Credit Event (Own)	0.1255***		0.1252***	0.0218***		0.0207***
	(5.97)		(5.88)	(3.74)		(3.51)
Credit Event (Peer)		0.0888***	0.0893***		0.0001	0.0002
		(3.10)	(3.12)		(0.02)	(0.03)
Loan Type FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry-Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15,513	14,800	14,800	12,636	12,000	12,000
Adjusted R^2	0.5666	0.5485	0.5496	0.6845	0.6789	0.6792

Research Question III

Do lower-level bankers facilitate large-scale lending decisions?

Banker Influence Results I

$$LoanSpread_{i,b,t} = \rho PredictedPriorSpread_{i,b,t} + Controls + \eta_{i,b,t}$$

- We test whether bankers anchor credit spreads based on past loans (to other borrowers) in their portfolio
  - *PriorSpread* is defined as the last loan originated by the banker
  - *PredictedPriorSpread* is the average loan spread during that year
- If $\rho > 0$, then the banker anchored the credit spread to the past loans of a different borrower

- We also test whether banks anchor credit spreads based on the past loans of other borrowers
  - *PriorSpread* is Defined as the Last Loan originated by the bank to a firm in the same industry
  - *PredictedPriorSpread* is the average loan spread during that year
- If $\rho > 0$, then the bank anchored the credit spread to the past loans of a different borrower

Banker Influence Results II

Dep. Var.: *Spread*	(1)	(2)	(3)	(4)
Prior Spread (Banker)	0.0630**			
	(2.84)			
Predicted Prior Spread (Banker)		0.0671**		
		(2.53)		
Prior Spread (Bank)			0.0167	
			(1.09)	
Predicted Prior Spread (Bank)				0.0120
				(0.48)
Year FE	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes
Loan Type FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Observations	2,724	2,724	3,165	3,165
Adjusted R^2	0.6144 5	0.6126	0.5286	0.5284

Banker Influence Results III

- We also examine how much of loan characteristics and outcomes can be explained by banker fixed effects
  - Banker fixed effects explain 23-39% of the variation
  - Bank fixed effects explain 4-7% of the variation

Dep. Var.:	(1) *Loan Spreads*	(2) *Default*	(3) *Downgrades*
R^2 **explained**			
Banker FE	22.68%	38.97%	36.14%
Subsidiary Bank FE	6.57%	5.32%	4.22%
Bankers FE/Bank FE	3.45	7.32	8.56
Controls	Yes	Yes	Yes
Banker FE	Yes	Yes	Yes
Subsidiary Bank FE	Yes	Yes	Yes

Conclusion

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Result II: Banks discipline bankers following credit events (loan downgrade/default, borrower bankruptcy)

- The relative likelihood of turnover increases by 50% following a credit event
- The likelihood of turnover is greater for (i) defaults/bankruptcies and (ii) lead arrangers
- Face demotion/employment at a smaller bank following negative credit events

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Summary Statitsics

- In a given year, 10% of bankers experience a credit event in the portfolio

Variable	N	Mean	Std Dev.
Downgrade	7,585	0.090	0.286
Default/Bankruptcy	7,585	0.017	0.129
AllEvents	7,585	0.100	0.300